May 23, 1958

Dr. Lee DuBridge California Institute of Technology Pasadena 4, California

Dear Dr. DuBridge:

Thank you very much for sending the fall text of your talk. I would assume that you have already submitted the substance of your remarks to the Congressional committees which are considering the NASA Bill.

Having read the full text, I am sure you will find that most of the scientific community is thinking along very similar lines. Many of us may have made a strategic error in criticizing the Administration for the low priority it had given Vanguard; now the milk is spilt, we are almost certainly over-reacting.

The point about manned spaceflight seems to me especially cogent. Most lay-mentwill have a difficult time distinguishing between scientific and adventurous exploration, and in discerning the advantages of instrumented flights versus the essential meaninglessness of the 'direct' experience of manned flight.

But it appears as if the Air Force is already committed to an unshakeable objective of manned space flight, and I don't see how it will be possible to divert very large sums of money from such objectives to more plausible ones. Perhaps they can argue that while the arguments you summarize read very plausibly against the military value of a lunar base, they cannot afford to overlook any possibility that would bear on the national security. We castainly do not have all the information we ought to have before making conclusive judgments -- for example by some extrapolation of the already tenuous arguments in the enclosure it is not altogether impossible that the lunar surface might have some unsuspected possibilities by way of raw materials for fuel and nutrient. However, one doubts that the impulse to a program of manned spaceflight is based on any scientific reasoning. There is certainly going to be a perfectly understandable bias on the part of missile manufacturers and supporting industries in favor of a crash program; the long-standing space-oriented ambitions of the erstwile Peenemunde group is no small factor either. One can only hope that the impending NASA will serve as a channel for the best, disinterested scientific advice that you mention in your talk as essential for a balanced approach. It still seems to me fantastic that the Congress should have cut back the NSF budget from its not very impressive initial recommendation at the same time that it is contemplating such huge expenditures in space research.

If I can help in any way in seconding your position, or to mobilize what I know to be the overwhelming scientific opinion in favor of it in this community, please let me know.

Yours sincerely,

Joshua Lederberg Professor of Genetics